



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,500	03/08/2004	John H. Bui	015114-070600US	3009
26059	7590	10/17/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW LLP/ 015114			WELLS, KENNETH B	
TWO EMBARCADERO CENTER			ART UNIT	
8TH FLOOR			PAPER NUMBER	
SAN FRANCISCO, CA 94111-3834			2816	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/796,500	BUI, JOHN H.	
	Examiner	Art Unit	
	Kenneth B. Wells	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 10-12, 14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-6, 10-12, 14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 3 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2816

1. Applicant's election of species C (corresponding to Fig. 5A) is hereby acknowledged. Examination of claims 1-6, 8, 10-12, 14 and 16-19 is now set forth.

2. The disclosure is objected to because of the following informalities: On page 2, line 8, the word --as-- should be inserted after "used". On page 4, line 10, "difference" is misspelled. On line 27 of page 4, --the-- should be inserted after the comma. Finally, on page 6, line 13, "transistor" should be made plural.

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 10-12, 14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by either Alexander or Lewicki et al.

In Alexander, note Figs. 1 and 3, where the recited first differential pair reads on transistors 12 and 14; the

Art Unit: 2816

recited third and fourth transistors read on transistors 40 and 42; the recited multiplexer is shown in Fig. 3 (all of the circuitry to the left of the vertical-line). The limitations on the last three lines of claim 1 are deemed to be inherent in the operation of Alexander. The disable signal is shown in Fig. 3 of Alexander as the signal /Pc (applied to the clock inputs of flip-flops 68 and 69) and the recited plural programming signals are the control inputs of switches 80, 82, 84, etc. The further functional limitations recited in claims 2, 10, 11, 12, 14 and 16-19 are deemed to be inherent in the operation of the Alexander circuitry shown in Figs. 1 and 3. The recited fifth and sixth transistors of claim 4 read on the transistors 22 and 24 (they receive the input signal at terminals 30, 32 at their drain terminals when switches 50 and 52 are closed).

In Lewicki et al, note Fig. 2, where the recited first differential pair reads on transistors M1 and M2; the recited third and fourth transistors read on M3 and M4; and the recited multiplexer reads on the combination of circuit 21, switches s1-s4, and the voltage source labeled $V_{HYSTERESIS}$. As noted above with regard to Alexander, the recited functional limitation of the claims are deemed to

Art Unit: 2816

be inherent in the Fig. 2 circuitry of Lewicki et al. The disable signal is signal RESET in Fig. 2 of Lewicki.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander or Lewicki et al.

The use of the Alexander or Lewicki et al circuitry discussed above in a field programmable gate array would have been obvious to one having ordinary skill in the art, the motivation being to obtain the advantages taught by the two primary references in an environment which would employ the hysteresis comparators taught by these two references.

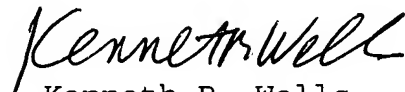
5. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2816

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached at (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth B. Wells
Primary Examiner
Art Unit 2816

October 13, 2005